

Application No. 10/762,658
Filed: January 22, 2004
TC Art Unit: 2814
Confirmation No.: 5151

REMARKS

Reconsideration is requested based on the previously submitted publication of Kabasawa et al. (1997). Kabasawa reports that the channel resistance of $Y_{0.9}Pr_{0.1}Ba_2Cu_3O_y/YBa_2Cu_3O_y$ materials increases at thicknesses of 7.5 nm or less. Thus, the basis of the rejection is on the assumption that the materials described by Misewich (see Col. 6, line 47) would operate at the thickness disclosed by Chu. However, this is directly contrary to the results of Kabawasa (see the underlined text at page 2303). Kabawasa state that the "sheet conductance of the channels with thickness less than 5 nm was lower than 10^{-8} s/sq. at room temperature and lower than the resolution limit of the measurement below the critical temperature of YBCO electrodes." Thus, one skilled in the art would not combine the disclosure of Chu with that of Misewich to reject the claims 1-7 and 16-21 under 35 U.S.C. 103(a).

Again, Misewich is relied upon for teaching a channel containing a metal, however, the materials of Misewich have insulating characteristics at the thicknesses recited in the claims. New claims 36-40 have been added

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The Examiner is encouraged to telephone the undersigned attorney to discuss any matter that would expedite allowance of the present application.

Respectfully submitted,

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